Labs Accomplishments (FY93)

Please circle the one most-appropriate category —

Nuclear Weapons Components/Materials and Processes Education Outreach Technology Transfer Safeguards and Security Pulsed Power Development Testing Supporting Technologies (includes research) Arms Control Verification Other Defense-Related Work (includes reimbursables) (Energy/Environment) Quality ES&H Advanced Manufacturing Information and Computation Transportation Biomedical Electronics Laboratories Support (administrative accomplishments, computing, construction, etc.)

Description of Accomplishment —

Brief (approximately 100 words); double-spaced; include importance or potential application, stressing interest to customers or potential customers. *Write out acronyms* when first mentioned, and *list funding source* for reimbursable items. At the end, please include in parentheses the numbers of organizations that made significant contributions to the accomplishment. The accomplishment must have occurred during FY93 — October '92 through September '93.

Lab Accomplishments (FY93)

Energy/Environment

Less than 6 months!--that's how long it took a Sandia-led multi-laboratory team to design and integrate the ***first-ever climate relevant payload for an unmanned aerospace vehicle (UAV)***. The payload carries five NASA radiometers for measuring the Earth's solar and thermal radiation and will support the DOE's Atmospheric Radiation Measurement (ARM) program in better understanding global warming issues. Funded through the Strategic Environmental Research and Development Program (SERDP), this payload had its first successful flight in November 1993 !!--but that will be reported next year. (8100, 5300, 8400, 2700)

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Center: 8100--Exploratory Systems/Program Development

Illustrations: photo of payload in UAV.. Caption: First ever climate relevant payload for an unmanned aerospace vehicle (UAV). The three uplooking radiometers may be seen in the black area. There are two more down-looking radiometers under the UAV.